DOCUMENT RESUME

ED 132 377 08 CE 009 130

TITLE	Vocational Education Curriculum Specialist (VECS). Module 1: The Scope of Vocational Education. Study Guide. (Teaching/Learning Module).
INSTITUTION	American Institutes for Research in the Behavioral Sciences, Palo Alto, Calif.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C.
PUB DATE	76
CONTRACT	OEC-0-74-9286
NOTE	103p.; For related documents see CE 009 129-136 and CE 009 192-206
EDRS PRICE	MF-$0.83 HC-$6.01 Plus Postage.
DESCRIPTORS	*Curriculum Development; *Educational Objectives; *Enrollment Trends; *Financial Support; Higher Education; Instructional Materials; Instructional Programs; Learning Modules; Post Secondary Education; Secondary Education; Specialists; Study Guides; Teacher Education; *Vocational Education

ABSTRACT

One of six introductory modules in a 22-module series designed to train vocational education curriculum specialists (VECS), this guide is intended for use by both instructor and student in a variety of education environments, including independent study, team teaching, seminars, and workshops, as well as in more conventional classroom settings. The guide has five major sections. Part I, Organizations and Administration, contains an overview and rationale, educational goals and performance objectives, recommended learning materials, and suggested reference materials. Part II, Content and Study Activities, contains the content outline arranged by goals. Study activities for each goal and its corresponding objectives follow each section of the content outline. Content focus is on historical, legal, and present definitions of vocational education, its fundamental concepts and basic objectives, the people served, and financial support. Part III, Group and Classroom Activities, suggests classroom or group activities and discussion questions keyed to specific content in the outline and to specific materials in the list of references. Part IV, Student Self-Check, contains questions directly related to the goals and objectives of the module, which may be used as a pretest or posttest or as a periodic self-check for students in determining their own progress throughout the module. Part V, Appendix, contains suggested responses to the study activities from part II and responses to the student self-checks. (The preface indicates that approximately 20 hours of out-of-class study will be necessary to complete this module). (HD)

Documents acquired by ERIC include many informal unpublished materials not available from other sources. ERIC makes every effort to obtain the best copy available. Nevertheless, items of marginal reproducibility are often encountered and this affects the quality of the microfiche and hardcopy reproductions ERIC makes available via the ERIC Document Reproduction Service (EDRS). EDRS is not responsible for the quality of the original document. Reproductions supplied by EDRS are the best that can be made from the original.

ED132377

VOCATIONAL EDUCATION CURRICULUM SPECIALIST

VECS

Module 1:

The Scope of Vocational Education

STUDY GUIDE

(TEACHING/LEARNING MODULE)

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Developed and disseminated pursuant to Contract No. OEC-0-74-9286 from the U. S. Office of Education under Part I - Curriculum Development in Vocational and Technical Education, Vocational Education Amendments of 1968, Public Law 90-576

by

American Institutes for Research
P.O. Box 1113
Palo Alto, California 94302
1976

DISCRIMINATION PROHIBITED - Title VI of the Civil Rights Acts of 1964 states: "No person in the United States, shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefit of or be subjected to discrimination under any program or activity receiving federal financial assistance." Therefore, the Vocational Education program, like all other programs or activities receiving financial assistance from the Department of Health, Education, and Welfare, must be operated in compliance with this law.

The opinions expressed herein do not necessarily reflect the position or policy of the U. S. Office of Education, and no official endorsement by the U. S. Office of Education should be inferred.

-Study Guide-

Module 1

THE SCOPE OF VOCATIONAL EDUCATION

This document is one of a series of teaching/learning modules designed to train Vocational Education Curriculum Specialists. The titles of all individually available documents in this series appear below:

INTRODUCTORY MODULES

1. The Scope of Vocational Education
2. Roles of Vocational Educators in Curriculum Management
3. Current Trends in Vocational Education
4. Organization of Vocational Education
5. Legislative Mandates for Vocational Education
6. The Preparation of Vocational Educators

CORE MODULES

1. Important Differences Among Learners
2. Learning Processes and Outcomes
3. Applying Knowledge of Learning Processes and Outcomes to Instruction
4. Assessing Manpower Needs and Supply in Vocational Education
5. Laying the Groundwork for Vocational Education Curriculum Design
6. Selecting Instructional Strategies for Vocational Education
7. Derivation and Specification of Instructional Objectives
8. Development of Instructional Materials
9. Testing Instructional Objectives
10. Fiscal Management of Vocational Education Programs
11. Introducing and Maintaining Innovation
12. Managing Vocational Education Programs
13. Basic Concepts in Educational Evaluation
14. General Methods and Techniques of Educational Evaluation
15. Procedures for Conducting Evaluations of Vocational Education

SEMINARS AND FIELD EXPERIENCE MODULE

(Seminars in Authority Roles and the Curriculum Specialist in Vocational Education, and Leadership Styles and Functions of the Curriculum Specialist in Vocational Education; field work in Project Design and Administration, Operation of School Programs, Evaluation of School Programs, Educational Research and Development, and State, Regional, and Federal Program Supervision)

INSTALLATION GUIDE

For sale by the Superintendent of Documents
U. S. Government Printing Office
Washington, D.C. 20402 Price $_ _ _
Stock No.

PREFACE

Who is a vocational education curriculum specialist? The answer to this question is not as simple as it might appear. A vocational education curriculum specialist is likely to work in many different capacities, including, but not limited to: instructor, department chairperson, dean of vocational-technical education, vocational supervisor, principal, state or local director of vocational education, and curriculum coordinator.

The specialist is, perhaps, more identifiable by his/her responsibilities, which include, but are not limited to:

- planning, organizing, actualizing, and controlling the work of an educational team performed to determine and achieve objectives.
- planning, organizing, and evaluating content and learning processes into sequential activities that facilitate the achievement of objectives.
- diagnosing present and projected training needs of business, industry, educational institutions, and the learner.
- knowing, comparing, and analyzing different theories of curriculum development, management, and evaluation and adapting them for use in vocational-technical education.

This teaching/learning module is part of a set of materials representing a comprehensive curriculum development project dealing with the training of vocational education curriculum specialists. The purpose of this two-year project was 1) to design, develop, and evaluate an advanced-level training program, with necessary instructional materials based on identified vocational education curriculum specialist competencies, and 2) to create an installation guide to assist instructors and administrators in the implementation process.

The curriculum presented here is, above all else, designed for flexible installation. These materials are not meant to be used only in the manner of an ordinary textbook. The materials can be used effectively by both instructor and student in a variety of educational environments, including independent study, team teaching, seminars, and workshops, as well as in more conventional classroom settings.

Dr. James A. Dunn
Principal Investigator and
presently Director,
Developmental Systems Group
American Institutes for Research

ACKNOWLEDGEMENTS

The Vocational Education Curriculum Specialist Project was a comprehensive development and evaluation effort involving the contribution of a large number of people: project staff, curriculum consultants, a national advisory panel, and a number of cooperating colleges and universities. This wide variety of valuable inputs makes it difficult to accurately credit ideas, techniques, suggestions, and contributions to their originators.

The members of the National Advisory Panel, listed below, were most helpful in their advice, suggestions, and criticisms.

Myron Blee	*Florida State Department of Education*
James L. Blue	*RCU Director, Olympia, Washington*
Ralph C. Bohn	*San Jose State University*
Ken Edwards	*International Brotherhood of Electrical Workers*
Mary Ellis	*President, American Vocational Association*
George McCabe	*Program Director, Consortium of California State University and Colleges*
Curtis Henson	*Atlanta Independent School District, Georgia*
Ben Hirst	*Director, Consortium of the States, Atlanta, Georgia*
Joseph Julianelle	*U. S. Department of Labor*
Lee Knack	*Industrial Relations Director, Morrison-Knudsen, Inc.*
Bette LaChapelle	*Wayne State University*
Jerome Moss, Jr.	*University of Minnesota*
Frank Pratzner	*CVE, Ohio State University*
Rita Richey	*Wayne State University*
Bryl R. Shoemaker	*Ohio State Department of Education*
William Stevenson	*Oklahoma State Department of Education*

The project would not have been possible without the cooperation and commitment of the field test institutions listed below.

California State University, Long Beach
California Polytechnic State University, San Luis Obispo
Consortium of California State University and Colleges
- California State University, Sacramento
- California State University, San Diego
- California State University, San Francisco
- California State University, San Jose
- California State University, Los Angeles

Iowa State University
University of California Los Angeles
University of Northern Colorado

Overall responsibility for the direction and quality of the project rested with James A. Dunn, Principal Investigator. Project management, supervision, and coordination were under the direction of John E. Bowers, Project Director.

TABLE OF CONTENTS

	Page
PREFACE	iii
ACKNOWLEDGEMENTS	iv
PART I. ORGANIZATION AND ADMINISTRATION	1
Guidelines	1
Overview and Rationale	2
Goals and Objectives	7
Recommended Materials	9
Suggested References	9
PART II. CONTENT AND STUDY ACTIVITIES	11
Goal 1.1	11
Historical Legal Definition of Vocational Education	11
Current Legal Definition of Vocational Education	13
Educators' Present Definition of Vocational Education	15
The Context of Vocational Education	18
Study Activities	24
Goal 1.2	27
Fundamental Concepts of Vocational Education	27
Basic Objectives of Vocational Education	32
Contributions of Vocational Education	36
Study Activities	41
Goal 1.3	45
Numbers and Kinds of People Served by Vocational Education	45
Financial Support for Vocational Education	50
Summary of Expenditures and Enrollment for Vocational Education	53
Study Activities	55

Page

PART III. GROUP AND CLASSROOM ACTIVITIES 57

Classroom Activities 57
Discussion Questions 65

PART IV. STUDENT SELF-CHECK 69

PART V. APPENDICES 77

Appendix A: Possible Study Activity Responses 77
Appendix B: Possible Self-Check Responses 87

Part I:

Organization and Administration

rationale, need, and benefit of vocational education. In order to perform effectively in these areas, the specialist needs to understand the scope of vocational education and to respond realistically to basic questions regarding the outreach and effectiveness of vocational education. Such questions might include: what is the mission of vocational education and to what degree has it been achieved? what are the fundamental concepts and objectives of vocational education? how does vocational education relate to other units of education? are maintenance, growth, and development reflected in vocational education enrollment and funding? This module attempts to answer these questions and others.

The first part of Module 1 describes the mission of vocational education as defined by legislation and by educational practitioners. It also describes the relationship of vocational education to general education, career education, community college education, special education, and adult education, including a definition and description of the different educational levels.

The second part of the module summarizes the fundamental concepts of vocational education in terms of philosophic, economic, and sociological foundations. The three basic objectives of vocational education (to meet the manpower needs of society, to increase the options available to each student, to serve as a motivating force to enhance all types of learning) have emerged in direct relationship to these fundamental concepts and to the legal and educational definitions of vocational education. The module suggests implications of the basic objectives.

Following a discussion of vocational education achievements and potential contributions to American society, the last part of the module gives pertinent enrollment statistics and financial support information that provides additional data on the growth, development, and current status of vocational education.

The need for developing curriculum specialists in vocational education has been well publicized by the National Conference for the Study of

Curriculum Development in Vocational and Technical Education (Dallas, March 5-7, 1969) and by subsequent regional clinics for curriculum development. This module followed by 20 additional modules is the U.S. Office of Education's response to the need for encouraging the development of curriculum specialists by providing individual and small unit instruction in the multiple competencies required by such specialists. The competencies as identified by the participants of the National Conference for the Study of Curriculum Development include:

- The ability to organize and coordinate the work of a team in a manner that will produce an effective curriculum
- The knowledge of the various theories related to curriculum development, the ability to compare and analyze different theories, and the ability to create adaptations for use in vocational-technical education.
- The capability for diagnosing the present and projected needs of the learner. (The diagnosis may entail occupational and job analysis; a complex extrapolation of economic trends; a survey of employment opportunities; or research designed to identify factors affecting the total development of the learner, including his ability to function effectively as a member of his family and community.)
- The ability to make competent judgments as to the validity and importance of content material. (In this area he must have the ability to use effectively representative advisory groups in determining the essentiality of content material and the validity of objectives.)
- A comprehensive understanding of the sociological and psychological principles of learning. (Of greater importance is the necessity for a thorough understanding of the application of these principles to the varied needs of a diverse learning group.)
- The ability to develop objectives in behavioral terms. (To be effective, the curriculum specialist must interpret performance goals in ways that communicate the intent of the program to all concerned.)

- The capability to organize content and learning processes into sequential activities that facilitate the achievement of the objectives.
- The ability to develop procedures for measuring the learner's progress and for providing the learner with feedback.
- The ability to translate objectives and instructional procedures into plans for materials and facilities.
- The ability to design and conduct research programs which will assist in testing and evaluating the materials in terms of the end results.
- The acumen and familiarity with the dynamics of social-political action in order to implement curriculum change and thereby overcome inertia or resistance to change.

Goals and Objectives

Upon completion of this module, the student will be able to achieve the following goals and objectives:

GOAL 1.1: BE ABLE TO ANALYZE AND INTERPRET THE MEANING OF VOCATIONAL EDUCATION IN TERMS OF LEGISLATION, PROGRAM, AND THE CONTEXT, OR ENVIRONMENT, IN WHICH VOCATIONAL EDUCATION IS FOUND.

- Objective 1.11 Define vocational education as it was conceived in 1917.
- Objective 1.12 Define vocational education as it is currently perceived.
- Objective 1.13 Define vocational education according to current legislation.
- Objective 1.14 Explain how vocational education relates to general education.
- Objective 1.15 Explain how vocational education relates to career education.
- Objective 1.16 Explain how vocational education relates to education in the community college.
- Objective 1.17 Explain how vocational education relates to adult education.
- Objective 1.18 Explain how vocational education relates to special education.

GOAL 1.2: BE ABLE TO SYNTHESIZE AND PRESENT THE PURPOSES AND FUNDAMENTAL CONCEPTS OF VOCATIONAL EDUCATION.

- Objective 1.21 Describe the major philosophic concepts of vocational education.
- Objective 1.22 Describe the major economic concepts of vocational education.
- Objective 1.23 Describe the major sociological concepts of vocational education.
- Objective 1.24 List the three basic objectives of vocational education.

Objective 1.25 Define the basic objectives of vocational education by providing examples and descriptions of each.

Objective 1.26 Explain the major contributions of vocational education to American society.

Objective 1.27 Provide a written rationale of the need for vocational education in the future.

GOAL 1.3: BE ABLE TO PRESENT SUMMARY DATA ON THE GROWTH, OUTREACH, AND EFFECTIVENESS OF VOCATIONAL EDUCATION PROGRAMS.

Objective 1.31 Compare past and present data regarding the numbers and kinds of people served by vocational education.

Objective 1.32 List characteristics of the people served by vocational education.

Objective 1.33 Describe vocational education enrollment at the various educational levels.

Objective 1.34 Describe vocational education enrollment in the occupational areas served.

Objective 1.35 Describe the financial support for vocational education from an historical viewpoint.

Objective 1.36 Compare financial support for vocational education among federal, state, and local sources.

Objective 1.37 Compare financial support of vocational education among the various educational levels.

Recommended Materials

1. Evans, Rupert N. Foundations of Vocational Education. Columbus, Ohio: Charles E. Merrill Publishing Company, 1971.

2. Thompson, John F. Foundations of Vocational Education: Social and Philosophical Concepts. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1973.

Suggested References

1. American Vocational Association. Vocational-Technical Terminology. Washington, D.C.: AVA, 1971.

2. Dewey, John. Philosophy of Education. Totowa, N.J.: Littlefield, Adams, & Co., 1971.

3. Division of Vocational Education. A Guide for the Development of Curriculum in Vocational and Technical Education. Los Angeles, California: University of California, 1969.

4. Ellis, Mary Louise. A Synthesis of Activities Leading to the Enactment of the Vocational Education Act of 1963. Submitted to Faculty of the Graduate College of Oklahoma State University in partial fulfillment of the requirements for the Degree of Doctor of Education. Ann Arbor, Michigan: University Microfilms, 1972.

5. Evans, Rupert N. Foundations of Vocational Education. Columbus, Ohio: Charles E. Merrill Publishing Company, 1971.

6. Gillie, A. C. Principles of Postsecondary Education. Columbus, Ohio: Charles E. Merrill Publishing Company, 1973.

7. Good, Carter V. Dictionary of Education. New York: McGraw-Hill Book Company, 1973.

8. Leighbody, G. B. Vocational Education in America's Schools. Chicago: American Technicological Society, 1972.

9. Mangum, Garth L. The Economic Education of Vocational Educators. Columbus, Ohio: The Center for Research in Vocational and Technical Education, 1969.

10. National Advisory Council on Vocational Education. Second Report, November 15, 1969. Annual Report, July 15, 1969.

11. National Schools Public Relations Association. Vocational Education: Innovations Revolutionize Career Training. 1971.

12. National Society for the Study of Education. Vocational Education. Chicago: University of Chicago Press, 1965.

13. Parks, Beverly J. An Exploratory Study of the Effects of a Career-Oriented Curriculum. University of Northern Colorado, 1974.

14. Prosser, Charles A. and Quigley, Thomas H. Vocational Education in a Democracy (2nd ed.) Chicago: American Technical Society, 1963.

15. Strong, Merle E. and Schaefer, Carl J. Introduction to Trade, Industrial, and Technical Education. Columbus, Ohio: Charles E. Merrill Publishing Company, 1975.

16. Summary Data: Vocational Education, Fiscal Year 1974. U.S. Department of Health, Education, and Welfare, Office of Education.

17. Thompson, John F. Foundations of Vocational Education: Social and Philosophical Concepts. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1973.

18. U.S. Office of Education. Work in America. Report of a Special Task Force to the Secretary of Health, Education, and Welfare. Cambridge, Mass.: MIT Press, 1971.

19. Venn, Grant. Man, Education, and Work: Postsecondary Vocational and Technical Education. Washington, D.C.: American Council on Education, 1964.

20. Vocational Education: The Bridge Between Man and His Work. General Report of the Advisory Council on Vocational Education. Washington, D.C.: U.S. Government Printing Office, 1968.

Part II:

Content and Study Activities

PART II
CONTENT AND STUDY ACTIVITIES

Goal 1.1

Content Outline	Activities-Resources
Goal 1.1: Definitions of Vocational Education.*	* As an introduction to this module, begin with Classroom Activity 1.
This module describes the scope of vocational education, in other words, what vocational education is, how it has come to be, what it has accomplished, and where it is headed. The most significant aspect of vocational education is that it has changed continually since 1917 and it continues to change in response to individual, manpower, and societal needs.	
A. Historical Legal Definition of Vocational Education: Population growth, rise of the factory system, increased mechanization, inadequacies of the apprenticeship system, and disappointment over the failure of land grant colleges under the Morrill Act to train workers for farm and factory jobs emphasized the need for a national plan for occupational education in the United States. This need resulted in the passage of the Smith-Hughes Act of 1917 which explicitly defined vocational education (15).	(15) Introduction to Trade, Industrial, and Technical Education, p. 4. Also see Foundations of Vocational Education: Social and Philosophical Concepts, p. 14.

1. The Smith-Hughes Act of 1917 was designed to promote vocational education in the fields of agriculture, home economics, trades and industry, and to provide for teacher training in these fields (4).
2. The act defined vocational education as "that education which is under public supervision or control; that the controlling purpose of such education shall be to fit individuals for useful employment; that such education shall be of less than college grade, and that such education be designed to meet the needs of persons over fourteen years of age who have entered or who are prepared to enter work (work of the farm or the work of a trade or industrial pursuit)" (17).
3. The act emphasized the words "fit" and "work." According to Venn, the 1917 legal definition of vocational education was narrowly constructed for a number of reasons:
   a. The drafters of the act wanted to bring vocational opportunities to the widest possible audience, which for "industrial training" meant putting vocational education into the high school.
   b. The authors of the act, bearing in mind what had happened to the manual arts program, took no chance that the utilitarian aspects of the new program

(4) A Synthesis of Activities Leading to the Vocational Education Act of 1963.

(17) Smith-Hughes Act of 1917, in Foundations of Vocational Education: Social and Philosophical Concepts, p. 107.

were going to be unduly encroached upon by hostile general educators.

c. The program, with its heavy emphasis on shop-farm experience, was designed to fit its graduates for useful employment, and not for additional study beyond high school. In 1917, the high school was the terminal point in education of almost all the students served by the program (19). *

B. Current Legal Definition of Vocational Education: The Vocational Education Act of 1963 marked the beginning of a broader legal definition for vocational education.

1. The 1963 act brought about expansion of objectives and programs.
   a. It permitted instruction in all occupational fields and levels other than those defined as professional.
   b. It expanded the clientele to be served as: (1) those in secondary schools, and (2) those preparing to enter the labor market who had completed or discontinued their formal education.
   c. To serve the above clientele, vocational education programs were authorized through a wide variety of public institutions (comprehensive high school, area schools, junior and community colleges, and residential schools).

(19) Man, Education and Work, pp. 64-66.
Also see (17) Foundations of Vocational Education: Social and Philosophical Concepts, p. 109.

* See Discussion Question A in Part III.

d. It authorized 10 percent of the annual appropriation to be used for research and for experimental and pilot programs (17).

2. In 1968 a new legal definition of vocational education was formulated. The Vocational Education Amendments of 1968 stated that: The term "vocational Education" means vocational or technical training or retraining which is given in schools or classes under public supervision and control or under contract with a State Board or local educational agency and is conducted as part of a program designed to prepare individuals for gainful employment as semi-skilled workers, skilled workers, or technicians or sub-professionals in recognized occupations and in new and emerging occupations or to prepare individuals for employment in occupations which the Commissioner determines, and specifies by regulation, to be generally considered professional or which requires a baccalaureate or higher degree; and such term includes vocational guidance and counseling in connection with such training or for the purpose of facilitating occupational choices; instruction related to the occupation or occupations for which the students are in training or instruction necessary for students to benefit from such training; job placement; the

(17) Foundations of Vocational Education: Social and Philosophical Concepts, p. 110.

training of persons engaged as, or preparing to become teachers in a vocational education program or preparing such teachers to meet special education needs of handicapped students; teachers, supervisors, or directors of such teachers while in such a training program; travel of students and vocational education personnel while engaged in a training program; and the acquisition, maintenance, and repair of instructional supplies, teaching aids, and equipment, but such term does not include the construction, acquisition or rental of land (17).*

(17) Vocational Education Amendments, 1968, in Foundations of Vocational Education: Social and Philosophical Concepts, p. 110.

* See Discussion Question B in Part III.

C. Educators' Present Definition of Vocational Education:* The legal definition of vocational education explains the parameters under which vocational education must be administered. Vocational educators and others explain vocational education in terms of its purpose in the total educational setting.

* Classroom Activity 2 in Part III is related to this topic.

1. In its broadest sense, vocational education is that part of education which makes an individual more employable in one group of occupations than in another. It may be differentiated from general education, which is of almost equal value regardless of the occupation which is to be followed (5).

(5) Foundations of Vocational Education, p. 1.

2. Vocational education is a program of education below college grade organized to

prepare the learner for entrance into a particular chosen vocation or to upgrade employed workers; it includes such divisions as trade and industrial education, health education, agricultural education, business and distributive education, and home economics education. Training or retraining (including field or laboratory work) is given in schools or classes under public supervision and control or under contract with a state board or local education agency (7).

(7) Dictionary of Education, 1973.

3. In the 1965 Yearbook of the National Society for the Study of Education, Barlow used the following definition of vocational education based upon the views of James Conant: The controlling purpose of vocational education programs at the highest level is to develop skills for useful employment. These programs relate work to a specific occupational goal but involve more than training for job skills.

   Vocational education is not offered in lieu of general academic education but grows out of it, supplementing and enhancing it. Vocational education is an integral part of the total education program and requires aptitude that students at the lowest academic level do not have (12).

(12) Vocational Education, p. 6.

4. The emerging philosophy of vocational education tends toward a broader definition. Thompson, a representative of vocational education leaders supporting such a philosophy, defines vocational education as: ..... any education that provides experiences, visual stimuli, affective awareness, cognitive information, or psychomotor skills; and that enhances the vocational development processes of exploring, establishing, and maintaining oneself in the world of work (17).*
5. The definition upon which this module and all subsequent modules is based is provided by the American Vocational Association: Vocational or technical training or retraining which is given in schools or classes (including field or laboratory work and remedial or related academic and technical instruction incident thereto) under public supervision and control or under contract with a state board or local educational agency, and is conducted as part of a program designed to prepare individuals for gainful employment as semiskilled or skilled workers or technicians or subprofessionals in recognized occupations and in new and emerging occupations, or to prepare individuals for enrollment in advanced technical education programs, but excluding any program to prepare individuals for employment in

(17) Foundations of Vocational Education: Social Philosophical Concepts, p. 216.

* See Discussion Question C in Part III.

occupations generally considered professional or which require a baccalaureate or higher degree (1).

(1) Vocational-Technical Terminology, 1971.

D. The Context of Vocational Education: Vocational education does not exist in isolation from other kinds of education. It is an integral part of the comprehensive high school, the community college, and the four-year colleges and universities. For that reason, vocational education has specific relationships to general education, career education, adult and continuing education, special education, and technical training.

1. Vocational Education and General Education: Both vocational and general education are equally essential for job success. Competency in spelling, grammar, reading, basic mathematics, work attitudes and habits, and oral communication skills (the domain of general education) increases significantly an individual's potential for job success. Vocational education can also make great contributions to the general development of many students. It can be seen as an alternative path to learning which ultimately leads to economic, social, and personal fulfillment (8).

(8) Vocational Education in America's Schools, Chap. 5.

Vocational and general education are compatible and mutually supportive. According to Leighbody, "Vocational education is

not a separate discipline within education, but it is a basic objective of all education and must be a basic element of each person's education." Within the comprehensive high school, vocational education for many students represents a culminating experience before entry into a specific occupation; for others it represents a springboard to further technical training, and for still others it represents a foundation upon which to build a career after further education and training (8).

2. Vocational Education and Career Education: Both vocational and career education emphasize preparation for work as one of the basic goals of American education. Career education is purposely intended to be broad and encompassing, emphasizing awareness of the world of work in the elementary grades, orientation and exploration of the world of work in the junior high school, and expoloration of and preparation for the world of work in the senior high school. At the high school level, vocational education becomes an integral and important aspect of the total career development process, serving as a major vehicle for the preparation of students for specific occupations or families of occupations. Because career development is a lifelong process, the need for work awareness, orientation,

exploration, and vocational preparation is cyclical in nature, becoming necessary at different times in an individual's life. Some vocational educators have advocated for many years the need to provide pupils at all levels with some occupationally oriented education. One of the purposes of career education is to meet this need.

3. Vocational Education and the Community College: Occupational education is potentially the most important contribution the community college can make to the overall higher education effort. Gillie, along with the Carnegie Commission on Higher Education, strongly urges the two-year institution to serve more aggressively in this capacity, to the extent that the overwhelming majority of two-year college students will be enrolled in occupation-oriented programs. The largest portion of postsecondary vocational students is likely to be adults who return to these institutions to update or upgrade their work skills, or to be completely retrained for new jobs. For this reason, occupational divisions within community colleges need to pay considerable attention to upgrading techniques to vertical specialization, add to differentiated entry points including high-level technical entry, mid-level occupational entry, and entry level (6).

(6) Principles of Postsecondary Vocational Education, pp. 219-221.

Although the community college has been emphasized as the major postsecondary institution, area vocational schools now exceed the number of community/junior colleges. There are about 1900 area vocational schools serving areas or regions of the United States, compared to about 1100 two-year colleges. About 50 percent of the area vocational schools are post-secondary occupational institutions, and 24 percent of them are also identified as two-year colleges by the American Association of Community Colleges. Only 40 percent of the two-year colleges meet the criteria for definition as "area vocational schools." Area vocational schools with postsecondary occupational programs are increasing in number. Some educators believe that they will continue to grow at a faster rate than community/junior colleges. The need for planning and articulation is obvious if all of our educational institutions are to be used efficiently (6).*

(6) Principles of Postsecondary Vocational Education, pp. 219-221.

* See Discussion Question D in Part III.

The Education Amendments of 1972 were signed into law by President Nixon on June 23, 1972. This law represents one of the most comprehensive pieces of federal education legislation passed to date, and it has special significance for

community colleges and vocational-technical education. Title X of this act is most significant for postsecondary vocational education (15).

(15) Education Amendments of 1972, in Introduction to Trade, Industrial, and Technical Education, pp. 28-30.

4. Vocational Education and Adult Education: The 1968 Vocational Amendments specify the types of individuals for whom vocational training is to be provided. Included are persons who have entered the labor market and who need training or retraining to achieve stability or advancement in employment. As mentioned in the preceding section, most of these students are adults. Part-time and full-time training classes are provided for adults at both secondary and postsecondary levels. Classes are usually conducted in the evening hours when school facilities are more available. However, many classes are also provided specifically to accommodate persons working night shifts (15).

(15) Introduction to Trade, Industrial, and Technical Education, pp. 28-30. Also see (10) for related information, Second Report of the National Advisory Council on Vocational Education, November 15, 1969.

Vocational educators are also involved with providing nonoccupation-related classes for adults. These classes are usually self-supporting through tuition and fees or local school financing. While the purpose of these classes is not vocational, occasionally the learning experience leads to new careers or new dimensions of existing careers. Classes are extremely varied in content, typically including such topics as auto

mechanics, woodworking, gourmet cooking, sewing, plastics, and art metal working (15).

5. Vocational Education and Special Education: The Vocational Education Amendments of 1968 stipulate that occupational education for the disadvantaged and handicapped be provided. The "disadvantaged" are those who fall into the lowest economic and social level of our society; their most universal characteristic is poverty. The Manpower Development and Training Act of 1962, the Vocational Education Act of 1963, the Elementary and Secondary Education Act of 1965, the Economic Opportunity Act (with its Job Corps), and the Vocational Education Amendments of 1968 have all identified education and training as the principal weapon for fighting poverty and as the means for the disadvantaged to join the mainstream of American society (8).*

   Vocational education has also been identified nationally and locally as a potentially major contributor to the education and training of the mentally and physically handicapped.

(15) Introduction to Trade, Industrial, and Technical Education, pp. 28-30. Also see (10) for related information, Second Report of the National Advisory Council on Vocational Education, November 15, 1969.

(8) Vocational Education in America's Schools, Chap. 8. Also see (10) Second Report of National Advisory Council on Vocational Education, November 15, 1969.

* See Classroom Activity 3 and Discussion Question E in Part III.

E. Study Activities

Based on your reading of the content outline and any additional references as suggested, complete the following activities.

1. How would you define vocational education? Write your definition by listing the major points you would include in the definition. For example:
    1. Vocational education is for all students.
    2. Vocational education is administered under local education agencies.
    3. etc.

2. Analyze and compare the following three definitions of vocational education by listing their major characteristics: vocational education as defined by the Smith-Hughes Act of 1917; vocational education as defined by the Vocational Education Amendments of 1968; and vocational education as defined by the American Vocational Association in 1971.

Smith-Hughes Act, 1917	1968 V.E. Amendments	Am. Voc. Assoc., 1971
1.	1.	1.
2.	2.	2.
3.	3.	3.
4.	4.	4.
5.	5.	5.

3. Briefly describe the context of vocational education.

4. What are the three most important points in relating vocational education and general education?

5. What are the three most important points in relating vocational education and career education?

6. What are the three most important points in relating vocational education and education in the community college?

7. What are the three most important points in relating vocational education and adult education?

8. What are the three most important points in relating vocational education and special education?

(See Appendix A for possible answers.)

Goal 1.2

Content Outline	Activities-Resources
Goal 1.2: The Objectives of Vocational Education.*	* As an introduction to this goal, use Classroom Activity 4.
Vocational education experienced a long gestation period from 1906 to 1917. During this time basic principles were established which have endured the test of time. These principles are still reflected in the present-day interpretation of the basic objectives of vocational education.	
A. Fundamental Concepts of Vocational Education * The principles, or fundamental concepts, on which the objectives of vocational education are based are classified by many authors under three categories: philosophic, economic, and sociological.	* Students may wish to participate in Activities for Addtional Credit.
1. Philosophic Concepts of Vocational Education: The leaders who planned and established vocational education in 1917 maintained that the schools had an obligation to serve those students who moved from the high school into the world of work, as well as those who moved on to college (8).	(8) Vocational Education in America's Schools, Chap. 1.
In a democracy every student must have enough education to enable him to understand the basic problems of society, to vote intelligently, to develop fully his human talents, and to develop a life style that fits his needs and talents. This	

charge certainly included instruction on the importance of the world of work. The need for practical, work-oriented education has been voiced not only by vocational educators and their supporters, but also by the general public and many general education leaders (5).

(5) Foundations of Vocational Education, pp. 76-78.

a. As early as 1918, educational leaders identified career development as a major educational objective. It was during this year that the Commission on Reorganization of Secondary Education published the Cardinal Principles of Secondary Education, in which "vocation" was number four among the seven objectives listed. The Commission determined that "a good citizen earns his living, contributes to the general welfare by working, and maintains desirable relationships with fellow workers" (13).

(13) An Exploratory Study of The Effects of a Career Oriented Curriculum, pp. 1-3.

b. In 1938 the Educational Policies Commission of the National Education Association listed four major school objectives, among which "economic efficiency" was one. The Commission felt that it was the responsibility of the schools to develop individuals who are able to select their own vocations, plan their own economic life, and understand the requirements of their vocations (13).

(13) The Effects of a Career Oriented Curriculum, pp. 1-3.

c. The Educational Policies Commission of 1944 outlined the "ten imperative needs of youth." First on this list was: "All youth need to develop saleable skills and those understandings and attitudes that make the worker an intelligent and productive participant in economic life" (Educational Policies Commission, 1944). In 1961 the Educational Policies Commission emphasized the instrumental value of school subjects in contributing to occupational competence (13).*

* See Discussion Question F in Part III.

d. In September of 1973, the Phi Delta Kappan, after being involved in what was described as "one of the most extensive and systematized educational goal searches ever launched in American education," presented a list of 18 goals of education. Among the goals described in that list, four are directly related to career development. They are as follows:

1. Develop pride in work and a feeling of self worth.
2. Learn to respect and get along with people with whom we work and live.
3. Gain information needed to make job selections.
4. Develop skills to enter a specific field of work (13).*

(13) The Effects of a Career Oriented Curriculum, pp. 1-3.

* See Discussion Question G in Part III.

2. Economic Concepts of Vocational Education: The founders of vocational education directed much of their attention to its economic benefits. Mangum defines economics as "the most efficient way of utilizing available human, natural, and capital resources to fill the needs and achieve the objectives of society." Vocational education began when the United States was beyond the agrarian stage of economics and natural resources were the critical determinant of wealth. It began during the industrial era when the accumulation and use of capital were the key to economic growth. In this type of economy, human resources development was subordinate to the short-term needs of the labor market where employers urgently needed skilled workmen (9).

(9) The Economic Education of Vocational Educators. Also See (5) Foundations of Vocational Education, Chap. 7.

Vocational education is changing emphasis in the current economic stage, an emerging post-industrial economy in which human resources are rising to prime importance. The "heavy" industries of manufacturing and trades have been replaced by the faster growing "service" industries. Up to the 1950s the majority of the work force was involved in manufacturing and goods-producing occupations. Beginning in the 1950s the service-producing industries--government, transportation, public

utilities, finance, real estate, etc.--took the lead as the dominant supplier of jobs in the total job market. By 1980 the service-producing industries are expected to employ twice as many workers as the goods-producing industries. Women seeking jobs for longer periods of their lives and seeking jobs traditionally held by men also influence the economic and occupational structure (17).

(17) Foundations of Vocational Educations: Social and Philosophical Concepts, p. 14.

3. Sociological Concepts of Vocational Education:* Improvement of the living standards of all people through training for work was an important element in the thinking of some founders of vocatinal education. In 1925 Prosser and Allen ascribed most social ills to vocational incompetence and concluded that vocational education was the answer to many of them. Among the social problems mentioned were unemployment, the alienation of youth, lack of respect for American institutions, juvenile delinquency, adult crime, unstable and unsatisfying homes (14).

* Classroom Activity 5 is important to this section.

(14) Vocational Education in a Democracy.

In 1949 Prosser and Quigley pointed out some of the same social problems as evidence of society's need for vocational education. One of the major problems mentioned at this time was "the maladjustment of youth in the reconversion to peace" (14).

(14) As above, Chap. 14.

The November 15, 1969 report of the National Advisory Council on Vocational Education placed equal emphasis on the belief that more vocational education would reduce or eliminate much unemployment, as well as reduce violence, distrust of society by the young, campus and university revolt, and racial unrest (10).

(10) National Advisory Council on Vocational Education, Second Report, November 15, 1969.

The 1973 report of the Special Task Force to the Secretary of Health, Education, and Welfare emphasized the importance of work in maintaining physical and mental health and self-esteem (18).

(18) Work in America.

B. Basic Objectives of Vocational Education

The three basic objectives of vocational education discussed in this section are widely accepted by public school agencies as the focus for curriculum development. These objectives, however, do not necessarily apply to programs designed to meet short-term manpower needs, such as those sponsored by employers. All manpower development programs and private vocational schools are not likely to embrace these objectives. Comprehensive high schools and community colleges are the most appropriate settings for achieving these objectives. The three basic objectives of vocational education as identified by Evans are stated and briefly explained (5).

(5) Foundations of Vocational Education, Chap. 1.

1. To Meet the Manpower Needs of Society: This objective is the earliest and most widely accepted in vocational education and has been stated or included in every piece of vocational education legislation beginning with the Smith-Hughes Act of 1917. One of the best examples of meeting manpower needs occurred during World War II under the Vocational Education for National Defense Act of 1940. The shops and laboratories of vocational schools and programs readily lent themselves to the training of skilled manpower to produce the materials needed in the war effort. Vocational educators held training seminars around the clock. The training of over seven million production workers to meet the needs of industry was a substantial achievement during that historical period of manpower shortages (15).

(15) Introduction to Trade, Industrial, and Technical Education, p. 34. Also see (5) Foundations of Vocational Education, Chap. 1.

Vocational educators and their programs continue to place highest priority upon training manpower for the needs of society. Continuing efforts toward more accurate manpower forecasting are being made. Related efforts include more program planning, articulation, and follow-up.

2. To Increase the Options Available to Each Student:* Most vocational educators view their curriculum as helping to increase individual career options. Unlike general education, vocational education provides experiential learning inside and beyond the classroom that develops skills which can be used in a number of settings. According to Project Talent (1961), which tested and followed up five percent of the students in U.S. high schools, the general education curriculum produced 67 percent of the high school dropouts. Its graduates ranked behind both the college preparatory and vocational curricula in (1) proportion who go to college, (2) annual earnings, (3) job satisfaction; the length of unemployment, and frequency of unemployment are greater (5).

The Vocational Education Act of 1963 supported the long-time goal of vocational education to meet the nation's manpower needs, but the act turned the emphasis of the program toward meeting the needs of the people. With this act, it became a primary objective of vocational education to help people of all employable age groups and every category of need to become and remain gainfully employed. In

* Classroom Activity 4 is appropriate at this time if it has not been completed previously.

(5) Foundations of Vocational Education, p. 29.

essence, this new emphasis established a more sociological and humanitarian orientation for vocational education (5).

(5) Foundations of Vocational Education, Chap. 5.

3. To Serve as a Motivating Force to Enhance All Types of Learning: The most general view of vocational education is that it provides the essential content needed for occupational success. Under this point of view, much general education is included. Evans defines "general vocational education" as that education which is related to occupational life and is also needed by all students (5).*

(5) As above, Chap. 3.

* See Discussion Question H in Part III.

The third objective of vocational education was explained by Mr. Hugh Calckins, Chairman of the National Advisory Council on Vocational Education, in the following manner: "Most of those who fail to learn to figure, read, and write in our schools, fail because schooling seems to them an exercise in futility. Books which are irrelevant to their interests, classes which are oriented toward further years of schooling beyond the 12th grade, mathematics which seem to serve no useful purpose, do not get the attention of boys and girls brought up to solve immediate problems. The elementary grades are where vocational and technical education must begin for all students. This is where the connection between reading and employment, arithmetic and income, writing

and self-respect, must be made clear. To the public, these connections are obvious. The public expects that school will make them obvious to the student also" (10).

(10) National Advisory Council on Vocational Education, Second Report, p. 2.

The real purpose of this third objective is to make schooling as relevant as possible to as many students as possible in order to encourage and enhance individual development toward successful living.

C. Contributions of Vocational Education: A study of the history of vocational education provides a documentation of the efforts of the United States to educate all of its people.

1. Land Grant Colleges: The institutions and programs created under the Morrill Act (1862) have emerged as advanced professional schools, chiefly in engineering and agriculture. Most of these institutions have become part of state university systems.
2. Trained Manpower: Vocational education has traditionally attempted to provide skilled manpower for the United States in the industrial and business areas.*
3. Educational Relevance: Vocational education has introduced and implemented unique educational strategies into the public school curriculum.
   a. cooperative education,
   b. utilization of local advisory groups,

* See Discussion Question I in Part III.

c. youth groups providing practical experience,

d. placement and follow-up of students.

4. Attempts to Reduce Unemployment

a. Manpower Development Training Act (MDTA): A broad range of programs is provided under this federal act in which the Department of Labor's Manpower Administration, federal-state Employment Service Offices, and the U.S. Office of Education cooperatively participate. Designed to train people for jobs in which manpower needs exist or are anticipated, MDTA programs can provide basic education, institutional training in classrooms and vocational labs, pre-apprenticeship training, on-the-job training at a business or industry, or a combination of institutional and on-the-job training (11). Programs can be organized on a group basis or by individual referral, and trainees receive financial support during their training period. Emphasis is on the disadvantaged, unemployed, and under-employed. A special MDTA program is the Experimental and Demonstration Program (E&D) under which contracts are made with public or private organizations to test new approaches to the training of hard-core unemployed and underemployed

(11) Vocational Education: Innovations Revolutionize Career Training.

persons. Major emphases in E&D include enlisting private employer support to meet unemployment problems of the disadvantaged and direct involvement of minority groups in organizing and conducting the programs (11).

(11) Vocational Education: Innovations Revolutionize Career Training.

b. Cooperative Area Manpower Planning System (CAMPS): Eight federal agencies are involved in this unified effort to coordinate vocational education and manpower. The heart of this system is coordinated planning at the local area level, and more than 400 local CAMPS committees are already in existence and at work. Each local committee includes representatives of the participating agencies; the committee's task is to develop a blueprint for action which takes into account the specific manpower needs of the local area, available resources and services for meeting those needs, and the order of priorities for attacking the needs (11).

5. Achievements Identified by Panel of Consultants: In 1967 the Advisory Council on Vocational Education cited the achievements of vocational education:

a. The extension program in vocational education for out-of-school youth and adults in 1960-61 enrolled 283,922 more students than the in-school youth program.

b. Over two-thirds of those enrolled in area technical programs were out-of-school youth and adults. Of 620 institutions offering area technician training, 31 percent were community (junior) college or four-year institutions of higher education.

c. In the large cities, the vocational education enrollment represented 115,575 students, 18 percent of the total enrollment in grades 10-12.

d. Employers report that the distributive education program is a valuable source of competent salespeople and management trainees.

e. In its 45-year history, vocational education has responded well to the nation's needs in two world war efforts, the depression of the 1930s, and the readjustment of World War II veterans.

f. Emergency training programs were assimilated into the public vocational program, apparently without harmful effects to the regular program.

g. A start has been made, under the Area Redevelopment Act and the Manpower Development and Training Act, to utilize vocational training for improvement of economic conditions.

h. Vocational education in the United States has made many contributions to the development of comparable programs in other nations.

6. Potential Contributions of Vocational Education: The need for vocational education in the future is not likely to diminish. Vocational education will be a major contributor to help raise the standard of living for all people; to provide better education, health, and housing; to assist urban rebuilding, improved transportation, and crime reduction; to assist in the development and improvement of environmental quality.

More specific problems will be addressed by vocational education, such as:

a. To help provide opportunities for every adolescent to secure some actual work experience as part of the whole process of decision making (8);
b. To help provide women and minorities with skills that enable them to enter a greater variety of occupations;
c. To help provide better education and placement of the handicapped;
d. To help provide high-level technical training.*

(8) Vocational Education in America's Schools, p. 45.

* See Discussion Question J in Part III.

D. Study Activities

Based on your reading of the content outline and any additional references as suggested, complete the following activities.

1. How would you define the following:
   a. philosophic concept?
   b. economic concept?
   c. sociological concept?

2. Write down the earliest and most widely accepted objective for vocational education and below it list two philosophic concepts, two economic concepts, and two sociological concepts which support that objective.

3. Write down the second most important objective for vocational education as defined by Evans and below it list two philosophic concepts, two economic concepts, and two sociological concepts which support that objective.

4. What does Evans consider to be the third major objective of vocational education?

5. What statement most accurately explains the third objective of vocational education as you wrote it down in number 4?

Answer "true" or "false" to the statements given in numbers 6-9 regarding the contributions and potential contributions of vocational education to American society. Statements which reflect real or potential contributions should be answered "true." Statements which do not reflect real or potential contributions should be answered "false."

6. _____a. Major universities and colleges have emerged as the result of initial efforts in vocational education.

_____b. Utilization of advisory groups, placement and follow-up techniques, and cooperative education represent contributions made by vocational education to instructional methodology in the schools.

_____c. Successful career education programs at the elementary and junior high school levels are the direct result of vocational education programs in the senior high schools.

7. _____a. Vocational educators have developed highly accurate manpower forecasting techniques.

_____b. Employers have reported that vocational education has been a valuable source for training future employees.

_____c. Vocational education has responded to training people for new and emerging careers in health, environmental conservation, fast foods industries, and aeronautics.

_____d. Vocational education has responded well to manpower needs during and preceding wars.

8. _____a. Vocational education has responded to the national need to reduce unemployment.

_____b. Vocational education has eliminated poverty and unemployment in the past.

_____c. The Manpower Development and Training Act (MDTA) and the Cooperative Area Manpower Planning System (CAMPS) represent efforts made by or with vocational education to reduce unemployment.

9. _____a. Vocational education is likely to end poverty and unemployment in the future.

_____b. Vocational education is likely to eliminate underemployment in the future.

_____c. Vocational education is likely to expand efforts and financing for career education at the elementary and junior high school level in the future.

_____d. Vocational education is likely to assist more women and minority groups enter employment in the future.

_____e. Vocational education is likely to assist in training manpower for future urban rebuilding and improved transportation.

_____f. Vocational education will likely have a significant role to play in reducing crime.

Goal 1.3

Content Outline	Activities-Resources

Goal 1.3: Scope of Vocational Education.

As the preceding sections have pointed out, vocational education has continuously expanded in regard to mission. Vocational education has also continued to grow in enrollment and financial support.

A. Numbers and Kinds of People Served by Vocational Education:* Vocational education serves two broad categories of people representing a large age variation: The in-school group: This group includes students in senior high schools, community colleges, and area vocational schools. This in-school group includes the bright students, the great mass of youth of normal intelligence, the reluctant, dull, handicapped, socioeconomically disadvantaged, and the functionally illiterate. All are included within the scope of vocational education. The in-school group ranges in age from 15 to 24 and is comprised mainly of those who are preparing for a place in the labor force or who have a desire to do so (20).

The out-of-school age group: This group consists of all members of the work force, both the employed and the unemployed. The employed need vocational education to keep up with the technology of their occupation, to maintain a

* Classroom Activity 6 provides discussion material related to this topic.

(20) Vocational Education: The Bridge Between Man and His Work, p. 20.

favorable position of occupational mobility by expanding knowledge and skills, and to retrain for new occupations. The unemployed need vocational education in order to enter or re-enter the labor force. The out-of-school group includes women who enter or re-enter the labor force, the unemployed with their numerous problems, the functionally illiterate who pose critical problems for vocational education, and the millions of employed workers who use vocational education to maintain and improve their occupational position (20).

1. Total Enrollment: Table 1 shows the total growth of the vocational education program from 1960 through 1974.*

(20) Vocational Education: The Bridge Between Man and His Work.

* See Discussion Question K in Part III.

Table 1

Total Enrollment in Vocational Education

1960-1974 (20)

Fiscal Year	Total Enrollment	Percentage Increase
1960	3,768,149	
1961	3,855,564	2.3
1962	4,072,677	5.6
1963	4,217,198	3.5
1964	4,566,390	8.3
1965	5,430,611	18.9
1966	6,070,059	11.7
1967	7,047,000	13.3
1968	7,534,000	6.9
1969	7,979,000	5.9
1970	8,794,000	10.2
1971	10,495,000	19.3
1974	13,555,639	29.1

(20) Three sources were used to compile this chart: Vocational Education: The Bridge Between Man and His Work, p. 11; (15) Introduction to Trade, Industrial, and Technical Education, p. 35; (16) Summary Data: Vocational Education Fiscal Year 1974.

2. Enrollment by Educational Level: Table 2 shows enrollment by secondary programs, postsecondary programs, adult programs, and programs for persons with special needs from 1966 through 1974. Most noticeable is the extraordinary growth in postsecondary enrollment.

(15) Two sources were used to compile this table: Introduction to Trade, Industrial, and Technical Education, p. 38, and (16) Summary Data: Vocational Education Fiscal Year 1974, p. 1.

Table 2
Vocational Enrollment by Educational Level
1966-1974 (15)

Level	Enrollment						
Secondary	3,048,000	3,533,000	3,843,000	4,079,000	5,114,000	6,495,000	8,433,750
Postsecondary	442,000	500,000	593,000	706,000	1,013,000	1,141,000	1,572,779
Adult	2,531,000	2,941,000	2,987,000	3,050,000	2,666,000	2,860,000	3,549,110
Special Needs	49,000	74,000	11,000	143,000			1,803,023
Fiscal Year	1966	1967	1968	1969	1970	1971	1974

3. Enrollment by States: Enrollment in vocational education in secondary schools compared with enrollment in grades 9-12 during fiscal year 1966 showed Vermont ranked highest, enrolling one-half of the secondary students in vocational education. Thirteen states enrolled at least 30 percent of the students in vocational education with Arkansas ranking the highest at the 38th percentile. Sixteen

states enrolled 20 percent of their secondary school population in vocational education with Idaho, Massachusetts, and Nevada enrolling at least 29 percent. California with the highest secondary student enrollment of any state in the union (1,207,416) enrolled 18.6 percent in vocational programs (20).

(20) Vocational Education: The Bridge Between Man and His Work, p. 20.

In a comparison between postsecondary vocational enrollment and the 20-24-year-age population, statistics showed that Washington enrolled at least 27 percent of that population in vocational education. California, with the largest 20-24-year-age group (1,313,000) enrolled 11 percent of those students in vocational programs, Wisconsin enrolled 8.5 percent, and North Dakota and Colorado each enrolled 5.2 percent. All other states enrolled less than 5 percent of the 20-24-year-age group in vocational education (20).

(20) Same as above, p. 22.

Table 3 summarizes the accountability (placement and follow-up) efforts carried out in vocational education programs. The table shows the placement of those students who have completed a vocational education program.

Table 3

Placement of Secondary Program Completions in Vocational Education, Fiscal Year 1974 (16)

(16) Summary Data: Selected Statistical Tables, Fiscal Year 1974, pp. 46-49.

Level	Total completions	NOT AVAILABLE: Status Unknown	NOT AVAILABLE: Continuing Study	NOT AVAILABLE: Other Reasons	AVAILABLE FOR PLACEMENT: Placed Full-Time	AVAILABLE FOR PLACEMENT: Unemployed	AVAILABLE FOR PLACEMENT: Other
Secondary	862,587	115,314	206,598	73,623	297,399	42,176	127,419
Postsecondary	346,448	46,718	31,454	20,523	189,351	19,496	38,906
Adult Preparatory	237,214	53,631	12,118	22,347	100,093	13,306	35,639
All Levels	1,446,249	215,663	250,170	116,493	586,843	74,058	201,964

B. Financial Support for Vocational Education:* Federal and local financial support for vocational education has been continuous and growth oriented. Federal funds for vocational education have been intended not only to help support but also to encourage the states and local districts to further promote vocational education programs. The degree to which this has taken place can be seen by the continued increase in state and local expenditures reported for vocational programs. Expenditures reported by state and local levels do not necessarily represent the total amounts they expend for vocational education. States are encouraged but not required to report funds which overmatch their federal allocations: States also do not report funds expended for

* Classroom Activity 6 will help students summarize the information of this section.

nonfederally reimbursed vocational programs (20).

1. Overall Expenditures for Vocational Education: Table 4 shows vocational education expenditures by source from 1960 through 1966.*

(20) Vocational Education: The Bridge Between Man and His Work, p. 37.

* See Discussion Question L in Part III.

Table 4

Expenditures for Vocational Education By Source, Fiscal Years 1960-1966 (20)

(20) Same as above, p. 38.

Year	Total Expenditure	Federal Expenditure	State Expenditure	Local Expenditure
1960	$238,811,764	$ 45,313,236	$ 82,465,778	$111,032,750
1961	254,073,395	48,009,534	89,154,684	116,909,177
1962	283,948,446	51,438,074	104,264,321	128,246,051
1963	308,899,618	54,581,887	112,685,158	141,632,573
1964	332,785,115	55,026,875	124,974,572	152,783,668
1965	604,645,726	156,936,015	186,734,833	260,974,879
1966	799,894,562	233,793,671	216,582,611	349,518,281

2. Federal, State, Local Expenditures for Vocational Education: Table 5 compares federal, state, and local expenditures for vocational education from 1967 through 1974.

Table 5
Expenditures for Vocational Education By Source, 1967-1974 (15)

Year	Total Expenditure	Federal Expenditure	State/Local Expenditure
1967	$1,004,000,000	$260,000,000	$ 743,000,000
1968	1,192,000,000	262,000,000	939,000,000
1969	1,368,000,000	254,000,000	1,114,000,000
1970	1,841,000,000	300,000,000	1,514,000,000
1971	2,347,000,000	396,000,000	1,951,000,000
1974	3,433,819,633	468,196,893	2,965,622,740

3. Vocational Education Expenditures for Different Educational Levels: Table 6 summarizes expenditures for vocational education at five different levels for fiscal year 1974.

Table 6
Total Expenditures for Vocational Education By Level and By Target Group, All Programs, Fiscal Year 1974 (15) *

Level	Total	Federal	Local/State
Grand Total	$3,436,041	$466,537	$2,969,504
Secondary	2,197,462	288,324	1,909,138
Postsecondary	980,836	130,464	850,372
Adult	257,743	47,749	209,994
Disadvantaged	306,466	100,497	205,969
Handicapped	78,689	42,305	36,384

(15) Introduction to Trade, Industrial, and Technical Education, p. 37, and (16) Summary Data, Vocational Education, Fiscal Year 1974.

* See Discussion Question M in Part III.

C. Summary of Expenditures and Enrollment for Vocational Education: Summary data for vocational education during fiscal year 1974 highlighted the following information:

1. About 3.5 billion dollars from federal, state, and local sources were expended for vocational education during FY 1974, an increase of 13.2 percent over FY 1973, with 13.6 percent being federal and 86.4 percent state and local funds.
2. For each dollar of federal funds expended, the states expended an average of $6.33, with a range among the states of $1.75 to $19.72.
3. Of the total expenditure of Part B funds, 24.3 percent was allocated to postsecondary programs, 17.7 percent for programs for the disadvantaged, and 11.3 percent for programs for the handicapped.
4. A total of 13,555,639 persons were enrolled in FY 1974, which was an increase of 1,483,194 or 12.3 percent over the FY 1973 total.
5. Secondary enrollment increased 1,079,788 or 14.7 percent to 8,433,750; postsecondary enrollment had the largest increase with 223,048 or 16.5 percent to 1,572,779; adult enrollment increased 180,358 or 5.4 percent to 3,549,110 (16).
6. A total of 1,612,160 disadvantaged persons and 234,115 handicapped persons received special services in order to succeed in

(16) Summary Data, Vocational Education, Fiscal Year 1974.

vocational education. Due to the continuing efforts of the states to document specific services to persons with special needs and better reporting, the disadvantaged enrollment increased only 0.7 percent over FY 1973 and the handicapped enrollment increased only 2.6 percent.

7. Enrollment in cooperative programs under Part G decreased by 23,109 or -13.7 percent to 145,342. In addition, 459,798 students were enrolled in cooperative programs under Part B and there were 43,684 work-study participants.
8. A total of 266,220 individual teachers were employed and 109,250 received in-service training. Also, 61,711 persons were enrolled in preservice teacher training.
9. Of the total program completions reported, 59.7 percent were available for placement, and of those 91.4 percent were employed (16).

(16) Summary Data, Vocational Education, Fiscal Year 1974.

D. Study Activities

Based on your reading of the content outline and any additional references as suggested, complete the following activities.

For numbers 1-5 provide a "yes" or "no" answer with a brief explanation for each answer.

1. Is vocational education designed to serve only one or two kinds of students?

2. Do enrollment figures from the 1960s through the 1970s indicate the success or effectiveness of vocational education?

3. Is there reason to believe that vocational education enrollment will continue to increase?

4. Has vocational education been successful in placing students in employment?

5. Have vocational expenditures shown an increase over the last ten years?

For activities 6 through 8, decide which statements in regard to vocational enrollment and expenditures are "true" or "false."

6. _____a. Since 1962 the largest percentage increase in vocational enrollment took place between 1966 and 1967.
   _____b. Enrollment in vocational education has consistently been greater at the secondary level than at any other educational level.

7. _____a. Agriculture still enrolls more students than any other occupational area.
   _____b. Office occupations represent one of the highest enrollments in vocational education programs.

_____c. Although secondary vocational enrollments are the highest of any educational level, only one state in the Union enrolls 50 percent of the secondary student population in vocational education.

_____d. Postsecondary vocational enrollments are among the fastest growing among all enrollments.

_____e. In 1966 postsecondary enrollments accounted for less than 4 percent of the 20-to-24-year age group.

8. _____a. For every federal dollar spent for vocational funding approximately six state and local dollars were spent.

_____b. Since at least 1960 local vocational education expenditures have generally exceeded those of state and federal sources.

_____c. More money is spent for postsecondary programs than for any other single educational level.

Part III:

Group and Classroom Activities

PART III
GROUP AND CLASSROOM ACTIVITIES

Classroom Activities

NOTE: The following activities are designed for use in the classroom to stimulate discussion on specific topics covered in this module. The activities are designed for use following student self-study; however, depending on the background and abilities of students, these abilities may not require previous self-study. All classroom activities are keyed to the content outline to indicate an appropriate point at which the activities might be presented.

1. As an introduction to this module, encourage a classroom discussion about the meaning of vocational education. Ask students to volunteer to write one statement that they would put into a definition of vocational education. Have various students write their statements on the blackboard. When a long list has been compiled, discuss the statements in terms of importance.

   Example: 1. (most important) Vocational education is for all students who can benefit from it.

   2. (second important) Vocational education means job placement after training is completed.

2. Invite a panel of local vocational educators to discuss their definition of vocational education before the class. You might include on the panel secondary teachers of vocational education, vocational teacher educators, vocational administrators and supervisors. You may wish to prepare a list of questions to which the panel can react such as:

1. How do you define vocational education to parents, boards of education, curriculum committees, etc.?
2. How did you derive your definition of vocational education?

3. Divide students into three groups and ask them to briefly (ten minutes) discuss the meaning of educational levels: post-secondary, adult and special needs. After ten minutes of small group discussions ask a spokesman from each group to present that group's definition of postsecondary, adult, and special needs.

Example: The National Advisory Council on Vocational Education identified postsecondary programs as those in which:

1. the individual is available for fulltime study;
2. the individual has completed or left high school;
3. the individual is not in the labor force on a fulltime basis (20).

Adult education has two basic classifications:

1. Adult preparatory (part-time study) which includes vocational education for persons who have already entered the labor market or are unemployed but need training in preparing for a new occupation;
2. Adult supplementary (part-time study/short intensive course) which includes vocational education for persons who have already entered the labor market and who need training to be updated or upgraded to achieve stability or advancement in their current employment (20).

Characteristics of special needs students and programs are not as clearly defined as those for adult education and post-secondary education; however, examples of projects for special needs include:

1. Occupational training consisting of a modified or upgraded academic curriculum and occupational program that provides students a dual opportunity for achievements in acquiring basic education skills and preparation for employment.
2. Training for a family of occupations in a single program.
3. Special programs with a range of occupational choice designed for dropouts and potential dropouts.

4. Sheltered workshops to provide vocational training for the physically and mentally handicapped.
5. Programs of remedial education for upgrading students for entry into regular vocational high schools.

4. This activity is designed to be a group role playing situation to decide what the major purpose of "schooling" should be.

Step 1:
Divide the class into five groups. Group 1 will represent a citizen's committee having participants from all levels of the community including professionals, skilled workers, educators and laymen, etc. Their task is to decide upon the major purpose of schooling from a comprehensive viewpoint.

Group 2 will represent a committee of vocational educators. Their task is to decide upon the major purpose of schooling from the vocational educator's point of view.

Group 3 will represent a group of general educators (science, art, physical education, English, etc.). Their task is to decide on the major purpose of schooling from the general ("academic") educator's point of view.

Group 4 will represent a parents' committee. Their task is to decide on the major purpose of schooling from the parent's point of view.

Group 5 will represent a school board. Their task is to decide upon the major purpose of schooling from a typical school board's point of view.

Step 2:

After assigning students to groups and explaining their tasks, you may want students to do some research related to their tasks, or you may want them to hold a discussion within each group in order to come to a conclusion.

Step 3:

Ask each group to present their conclusion to another group. These two groups must then negotiate a conclusion which is satisfactory to both groups.

All groups should have an opportunity to react with one another. A recorder should compile the different conclusions reached by his group.

Step 4: The instructor might collect and compile these conclusions and present them to the class for a discussion of the advantages and disadvantages of each.

NOTE: The task of the instructor during this activity is to circulate and provide pertinent information whenever appropriate.

5. Goal 3 of this module describes vocational enrollment and expenditures on a national basis. Sometimes these national statistics are not as meaningful as they might be to vocational educators as they fail to relate them to their own experiences and information dealing with enrollment and expenditures on a local level. The purpose of this exercise is to help students relate national trends in enrollment and expenditures to their local situation. This activity may be oral or written.

Step 1:

Ask students to list (or name) all the different kinds of people their particular vocational classes have served. (If students have not yet had teaching experience, ask them to recall the different kinds of people enrolled in the vocational classes in which they have participated.)

Example: During my experience as a business educator teacher, I have had many different kinds of students in my classes such as adult (24-40 years in age); adult (over 40 years in age); young adults (18-25 years in age); high school dropouts; academically oriented students; vocationally oriented students; physically handicapped students, etc.

Step 2:

After students have listed (or named) a number of characteristics associated with their enrollment ask them to discuss or briefly summarize in writing:

1. How their enrollments compare with the picture of national enrollment (see pp. 47 and 48 of the Content Outline).
2. How their vocational programs were able to help different people achieve their objectives.
3. How their vocational programs were limited in helping various people achieve their objectives.
4. How expenditures or lack of expenditures for these programs affected the outcomes.

6. The purpose of this activity is to help students analyze enrollment and expenditure statistics presented in tables.

Step 1:

The instructor should make a series of overlays based on the tables presented in this guide.

Step 2:

After selecting appropriate tables to be used for overlays, the instructor should compile a list of questions which will help students understand the signficance of the various tables.

Example: How do local expenditures compare to state expenditures?

How do local and state expenditures compare to federal expenditures?

How do expenditures for secondary programs compare to expenditures for postsecondary programs?

What percentage of people who have completed vocational programs are placed in full-time employment?

What spending trends (or priorities) have been demonstrated from 1960 to 1974?

Activities for Additional Credit

NOTE: These activities are designed for the student who wishes to obtain additional credit beyond the basic requirements of this module. You may choose to have the student write a paper on one of these activities, or to present this activity to the class or to discuss the activity with you.

1. Interview five different vocational educators representing different occupational areas or professional levels. The main purpose of the interview is to obtain each educator's opinion in regard to the major objectives of vocational education.

2. Through a current review of the literature, write a paper identifying the major contributors of vocational education to American Society from 1965 to 1975. Consider contributions in the following areas:

   Reduction of unemployment

   Reduction of underemployment

   Improvement of education for the disadvantaged

PART I
ORGANIZATION AND ADMINISTRATION

Guidelines

This study guide has five major sections. Each section contains useful information, suggestions, and/or activities that assist in the achievement of the competencies of a Vocational Education Curriculum Specialist. Each major section is briefly described below.

PART I: ORGANIZATION AND ADMINISTRATION

PART I contains an Overview and Rationale, Educational Goals and Performance Objectives, Recommended Learning Materials, and Suggested Reference Materials. This section will help the user answer the following questions:

- How is the module organized?
- What is the educational purpose of the module?
- What specifically should the user learn from this module?
- What are the specific competencies emphasized in this module?
- What learning materials are necessary?
- What related reference materials would be helpful?

PART II: CONTENT AND STUDY ACTIVITIES

Part II contains the content outline arranged by goals. The outline is a synthesis of information from many sources related to the major topics (goals and objectives) of the module. Study activities for each goal and its corresponding objectives follow each section of the content outline, allowing students to complete the exercises related to Goal 1 before going on to Goal 2.

PART III: GROUP AND CLASSROOM ACTIVITIES

The "Activities-Resources" column in the content outline contains references to classroom or group activities and discussion questions related to specific content in the outline. These activities and discussion questions

are located in PART III and are for optional use of either the instructor or the student. Both the classroom activities and discussion questions are accompanied by suggested responses for use as helpful examples only--they do not represent conclusive answers to the problems and issues addressed. Also contained in the "Activities-Resources" column are the reference numbers of the resources used to develop the content outline. These reference numbers correspond to the numbers of the Suggested Reference Materials in PART I.

PART IV: STUDENT SELF-CHECK

PART IV contains questions directly related to the goals and objectives of the module. The self-check may be used as a pre-test or as a post-test, or as a periodic self-check for students in determining their own progress throughout the module.

PART V: APPENDICES

Appendix A contains responses to the Study Activities from PART II, and Appendix B contains responses to the Student Self-Check. The responses provide immediate feedback to the user and allow the module to be used more effectively for individualized study. They have been included in the last part of the module as appendices to facilitate their removal should the user wish to use them at a later time rather than concurrently with the rest of the module.

Approximately 20 hours of out-of-class study will be necessary to complete this module.

Overview and Rationale

The responsibilities of the vocational education curriculum specialist are likely to include: (1) developing plans, programs, and objectives, (2) advising teachers and administrative personnel on trends in vocational education enrollment and funding procedures; and (3) identifying for the public and for educational agencies and committees the

Improvement of education for the handicapped
Training for new and emerging careers.

3. Research the purpose, operation, and effectiveness of the Comprehensive Employment Training Act.

Discussion Questions

A. Did the definition of vocational education change a great deal in subsequent legislation in the 30s, 40s, and 50s?

(Generally speaking the answer to this question is "no." The George-Deen Act of 1936 and the George-Barden Act of 1946 did not appreciably change this definition, but did add more disciplines and services. The former added distributive occupations and the latter added the salaries of vocational counselors and researchers. As late as 1962, the legal definition and foundations of vocational education were still based on the circumstances and assumptions of the Smith-Hughes Act of 1917.) (17)

B. What new thrusts are visible in the latest legal definition of vocational education?

(New and emerging occupations, facilitating occupational choice, emphasis upon the person being served by vocational education, etc.)

C. How would you define vocational education? Do all vocational educators agree upon a single definition of vocational education?

(The answer to this question is "no." Just as educators in general do not express a consensus on the "purpose of the school," vocational educators hold different views on what vocational education is. However, in most definitions of vocational education, there are consistent themes--vocational education is a viable part of an individual's total education; vocational education helps prepare, maintain, advance, and retrain individuals for employment; vocational education helps produce trained manpower for the benefit of the nation and the individual being trained.)

D. What articulation problems and questions might be solved by including two-year colleges in state master plans?

(What is the role of two-year colleges and occupational education in the overall higher education scheme? What is the role of area vocational schools that have the facilities to serve in a postsecondary capacity but have not been authorized to do so? Would postsecondary institutions also serve secondary students? Should area vocational schools and community colleges have different occupational programs? Should community college programs train for entry levels?)

E. Can vocational education eliminate poverty?

(According to Leighbody, none of the programs provided for by the above mentioned laws have been more than marginally successful. Limited results have been achieved only after dealing with many unanticipated social and individual problems. The long-term value of this vocational training is less apparent than many had hoped. It has helped some individuals to meet their immediate needs, but so far it has failed to reach the larger problems which cause poverty (8).

F. How do you feel about this issue? What is the purpose of schooling? How do you think the general public feels?

(Public response to these issues was gathered in the 1972 "Fourth Annual Gallup Poll of Public Attitudes Toward Education." In answer to the question, "People have different reasons why they want their children to get an education. What are the chief reasons that come to your mind?" The following responses were recorded with the percentage of respondents mentioning each in some form (13).

1.	To get a better job	44%
2.	To get along better with people of all levels of society	43%
3.	To make more money--to achieve financial success	38%
4.	To attain self-satisfaction	21%
5.	To stimulate their minds	15%
6.	Miscellaneous reasons	11%

G. What are your views? Does the United States need utilitarian education as well as liberal education?

(One educational leader expressed his ideas in this way: A truly liberal, and liberating education, would refuse today to isolate vocational training on any of its levels from a continuous education in the social, moral, and scientific contexts within which wisely administered callings and professions must function..... As far as school education is a part of the required practical means.....it must help banish the conception that the daily work and vocation of man are negligible in comparison with literary pursuits (2).

H. What are some examples of general vocational education?

[(1) an understanding of the economics of the production of goods and services; (2) an understanding of the social security system; (3) the ability to complete satisfactorily an application form for employment.]

I. What are some specific examples of vocational education's contribution to meeting manpower needs?

(For example: During World War I, as a result of activities supervised by the Federal Board for Vocational Education, 61,151 men were trained in 125 different centers. Occupations included were: radio and buzzer operators, auto mechanics auto drivers, machinists, electricians, woodworkers. Other efforts along this line included: vocational rehabilitation of servicemen, serving the paper pulp industry, cooperation with the naval department, completion of model aircraft project, training for practical nurses.)

J. What future contributions to education and training in the U.S. can you visualize for vocational education?

(You may want students to research and present ideas in regard to (1) crime reduction; (2) underemployment, (3) improved working conditions; (4) new occupational areas, etc.)

K. What might account for the substantial increase in the percentage of enrollment from 1964 to 1965? See Table 1.

(This growth is due primarily to the inclusion of vocational education for office occupations, which accounted for an additional enrollment of 730,904 persons. Also the general trend is that enrollment numbers significantly increase after the passage of significant federal legislation.) (20)

L. What trends can be identified by analyzing Table 4?

(For example: Surely the yearly growth between 1960 and 1964 was largely an increase in expenditures from state and local sources. Federal expenditures at this time did increase but not as much as state and local expenditures.)

M. In analyzing Table 6 and considering data on other tables, what might you conclude about spending priorities?

(Example: Secondary expenditures account for approximately two-thirds of the total expenditures for vocational education. The high school enrollment in vocational education constitutes approximately 50 percent of the total enrollment.)

Part IV:

Student Self-Check

PART IV
STUDENT SELF-CHECK

GOAL 1.1

1. What were the four main characteristics of vocational education as defined by the Smith-Hughes Act of 1917? (1.11)

2. What are the five main characteristics of vocational education as currently defined by the American Vocational Association? (1.12)

3. What is the most recent legislation which provides a comprehensive definition of vocational education? (1.13)

   _____a. Vocational Amendments of 1968
   _____b. Education Amendments of 1972
   _____c. Vocational Education Act of 1963

4. What is meant by the phrase "the context of vocational education"? (1.14)

   _____a. all the occupational service areas which are included in vocational education programs
   _____b. the environment in which vocational education is found, including its relationship to other kinds of education
   _____c. the relationship of vocational education and career education

5. For questions 5 and 6 check the statement that most accurately describes the relationship between vocational education and general education. (Check only one answer for each question.) (1.14)

   _____a. Both are equally important for job success.
   _____b. Both are given only at the high school level.
   _____c. Both provide career decision-making skills.

6. _____a. Students should participate in either general education or vocational education; the two should not be mixed.
   _____b. Both make contributions to the general development of the student.
   _____c. More students are enrolled in vocational education than in general education.

7. For questions 7 and 8 check the statement that most accurately describes the relationship between vocational education and career education. (Check only one answer for each question.) (1.15)
   _____a. The main purpose of career education is to prepare students for vocational education by the time they reach high school.
   _____b. Both vocational education and career education emphasize preparation for work as one of the basic goals of American education.
   _____c. Career education is a part of vocational education and should be offered only at the senior high school level.

8. _____a. Career education and vocational education emphasize four phases at different grade levels: awareness, orientation, exploration, preparation.
   _____b. The importance of vocational education has diminished as a result of career education.
   _____c. Vocational education is an important part of the preparation phase of career education.

9. Which statement most accurately describes the relationship between vocational education and the community college? (1.16)
   _____a. Community colleges enroll more vocational education students than secondary schools.
   _____b. There are more community colleges than area vocational schools.
   _____c. The largest portion of postsecondary vocational students is likely to be adults who return to update and upgrade their working skills.

10. Which statement most accurately describes the relationship between vocational education and adult education? (1.17)

_____a. Vocational educators are not involved with conducting non-occupation-related classes for adults.

_____b. There are very few adults enrolled in vocational classes.

_____c. Part-time and full-time vocational training classes are provided for adults at both the secondary and post-secondary levels.

11. Which statement most accurately describes the relationship between vocational education and special education? (1.18)

_____a. Vocational education has been mandated by law to provide education for the disadvantaged and handicapped.

_____b. Vocational education should not be considered a means for the disadvantaged to join the mainstream of American society.

_____c. There are no specific vocational programs that have been designed to serve the disadvantaged and handicapped.

GOAL 1.2

12. Under what three categories are the fundamental concepts of vocational education typically classified? (1.21)

13. List two philosophic justifications for vocational education. (1.21)

14. What is the major economic reason for including vocational education as an integral part of total education? (1.22)

_____a. Vocational education is needed to train more people for the "heavy" industries and manufacturing because it is the fastest growing occupational strata in the U.S.

_____b. Vocational education can eliminate poverty.

_____c. Trained manpower is needed for national economic growth.

15. Which statement best describes the sociological foundation for vocational education? (1.23)

_____a. Vocational education is one way of improving the general standard of living of many people.

_____b. There is evidence that vocational education has greatly reduced juvenile delinquency and adult crime.

_____c. Work is important to our society only from an economic point of view.

16. Write out the three basic objectives of vocational education as defined by Evans; then match the statements below with the appropriate objective by listing the letter of the statement under the appropriate objective. (1.24) (1.25)

a. This is the earliest and most widely accepted objective of vocational education.

b. Vocational education provides many alternatives for occupational choice.

c. Schooling should be as relevant as possible to as many students as possible in order to encourage and enhance individual development toward successful living.

d. Students should be able to make connections between school subjects and employability.

e. This objective remains as the highest priority for vocational education programs.

f. This objective has emerged due to the new emphasis placed on establishing a more sociological and humanitarian orientation for vocational education.

For questions 17, 18, and 19 list two major contributions of vocational education in regard to the following areas: (1.26)

17. Contributions to manpower needs:

18. Contributions to educational relevancy or innovation:

19. Contributions to reduction of unemployment:

20. Write a rationale of the need for vocational education ten years from now. The rationale statement should not exceed five sentences. (1.27)

GOAL 1.3

21. List five broad characteristics of the people typically served by vocational education. (1.31) (1.32)

22. Total enrollment in vocational education from 1960 to the present has: (1.33)

    _____a. increased.
    _____b. decreased.
    _____c. remained the same.

23. One of the largest increases in vocational enrollment took place: (1.33)

    _____a. between 1964 and 1965.
    _____b. between 1960 and 1961.
    _____c. between 1966 and 1967.

24. Since at least 1965 vocational enrollments have been highest at: (1.33)

    _____a. the postsecondary level.
    _____b. the adult education level.
    _____c. the secondary level.

25. From 1966 to 1974 vocational enrollments have been higher in: (1.33)

    _____a. adult education than in postsecondary education.
    _____b. adult education than in secondary education.
    _____c. special needs than in postsecondary education.

26. In 1966 how many states enrolled at least 50 percent of their secondary school population in vocational education? (1.33)

_____a. five states
_____b. one state
_____c. at least ten states

27. During 1966 vocational enrollments in postsecondary education in most states: (1.33)

_____a. exceeded 40 percent of the 20-to-24 year age group.
_____b. accounted for about 30 percent of the 20-to-24 year age group.
_____c. accounted for less than 5 percent of the 20-to-24 year age group.

28. According to the placement reports of fiscal year 1974, 1,446,249 students completed programs in vocational education. What happened to most of these students upon completion of their programs? (1.32) (1.33)

_____a. More students were left unemployed than placed in full-time work.
_____b. More continued with their studies than were placed in full-time work.
_____c. More were placed in full-time work than those left unemployed, those with status unknown, or those continuing study.
_____d. Most could not be accounted for.

29. Which statement most accurately describes the general trend in expenditures for vocational education? (1.35)

_____a. Vocational education has experienced continuous growth in enrollments and expenditures.
_____b. For every state and local dollar spent, approximately four federal dollars were expended.
_____c. Increases in vocational expenditures occur most frequently during depression periods.

30. Which statement most accurately describes the comparison among federal, state, and local expenditures for vocational education? (1.36)

_____a. The Federal Government provides the majority of funds for vocational education programs.

_____b. State expenditures for vocational education usually exceed local expenditures.

_____c. State and local expenditures have consistently exceeded federal expenditures. Presently, for every federal dollar spent approximately six state and local dollars were expended.

31. Which statement most accurately describes vocational expenditures at the various educational levels? (1.37)

_____a. Federal, state, and local expenditures are greatest at the secondary level.

_____b. Only state and local expenditures are greater for secondary vocational programs. Federal expenditures are greater at the postsecondary level.

_____c. In fiscal year 1974, there were no expenditures for vocational programs for the handicapped.

Part V:

Appendices

PART V
APPENDICES

Appendix A:
Possible Study Activity Responses

GOAL 1.1

1. There is no right or wrong answer to this question. An example response follows:

    1. Vocational education is any education that provides experiences, visual stimuli, affective awareness, cognitive information or psychomotor skills.

    2. Vocational education uses the above means to enhance vocational development.

    3. The vocational development process includes exploring, establishing, and maintaining oneself in the world of work. (See reference [18] p.216 for information related to this definition.)

Comparison of Definitions

2.

Smith Hughes Act, 1917	V.E. Amendments, 1968	Am. Voc. Assoc., 1971
1. Vocational education is under public supervision.	1. Vocational or technical training in schools or classes under public supervision or under contract of state board, or local education agency.	1. Vocational or technical training in schools or classes under public supervision or under contract of state board, or local education agency.
2. Major purpose of vocational education is to fit individuals for employment.	2. To prepare individuals for gainful employment as semi-skilled workers or technicians or sub-professionals or in new and emerging occupations. (Note: there is no age stipulation and is not strictly	2. To prepare individuals for gainful employment as semi-skilled, or skilled workers, or technicians, or subprofessionals in recognized occupations and new and emerging occupations.
3. Begins after the age of 14 and provides education below college level.		
4. For individuals who have entered or are prepared to work on the farm, or in trades and industry		

limited to occupations below the baccalaureate.)

3. Includes guidance and counseling.

4. Includes job placement, vocational teacher training, preparing teachers to meet special education needs of handicapped.

5. Includes acquisition maintenance, repair of instructional supplies, teaching aids, equipment.

3. To exclude occupations which require a baccalaureate or higher degree.

3. "Context" refers to the environment in which something is found. Vocational education is usually located in schools: comprehensive high schools, community colleges, area vocational schools, and private schools. Because vocational education is a part of a larger system of education, particularly in the comprehensive high school and community college, it is related to other kinds of education such as general education, career education, adult education, and special education. Vocational education also has a particular role and function at the community college level. The important thing is to recognize that vocational education is not isolated. It interfaces the entire educational spectrum.

4. Answers to this question might include any of the following, in addition to those you think are most important.

    1. Both are equally important for job success.

    2. Both make contributions to the general development of the student.

    3. They are compatible and mutually supportive.

    4. Both may represent a culminating experience for students leaving school.

    5. Both may serve as a background for further training and education.

5. Answers to this question might include any of the following, in addition to those you think are most important.

    1. Both vocational education and career education emphasize preparation for work as one of the basic goals of American education.

    2. Vocational education is an integral part of career education, particularly in the "preparation" phase.

    3. Vocational education and career education are not the same thing.

    4. Much of career education program funding has been paid out of vocational funds.

    5. Legislation needs to take place which will distinguish between the two in government departments or divisions and in funding.

6. Answers to this question might include any of the following, in addition to those you think are most important.

    1. The largest portion of the vocational enrollment in community college is likely to be adults who return to update and upgrade their working skills.

    2. Community colleges should serve as major vocational training schools at the postsecondary level.

    3. The community college needs to pay more attention to upgrading techniques, to vertical specialization, and to training for differentiated job entry points ranging from high-level technical entry to job-entry level.

    4. Vocational education offered in the community college needs to be included in state plans for vocational education.

    5. More articulation is needed among secondary and post-secondary vocational programs.

7. Answers to this question might include any of the following, in addition to those you think are most important.

    1. Many adults need vocational education for retraining in order to maintain or advance in their employment.

    2. Part-time and full-time vocational training classes are provided for adults at both the secondary and post-secondary levels.

    3. Nonoccupation-related classes for adults are in great demand by the public, including such classes as auto mechanics, woodworking, gourmet cooking, sewing, plastics, and art metal working.

4. Adult education has two basic classifications:

   a. Adult preparatory (part-time study) which includes vocational education for persons who have already entered the labor market or are unemployed but need retraining in preparing for a new occupation;

   b. Adult supplementary (part-time study/short intensive course) which includes vocational education for persons who have already entered the labor market and who need training to be updated or upgraded to achieve stability or advancement in their current employment (20).

8. Answers to this question might include any of the following, in addition to those you think are most important.

   1. Vocational education has been mandated by law to provide education for the disadvantaged and the handicapped.

   2. Characteristics of special needs students and programs are not as clearly defined as those for adult education and postsecondary education; however, examples of projects for special needs include:

      a. Occupational training consisting of a modified or upgraded academic curriculum and occupational programs that provide students a dual opportunity for achievement in acquiring basic education skills and preparatiion for employment.

      b. Training for a family of occupations in a single program.

      c. Special programs with a range of occupational choice designed for dropouts and potential dropouts.

      d. Sheltered workshops to provide vocational training for the physically and mentally handicapped.

      e. Programs of remedial education for upgrading students for entry into regular vocational high schools.

GOAL 1.2

1a. Philosophic concept - a search for the underlying causes and principles of reality; a quest for truth through logical reasoning; a critical examination of the grounds for fundamental beliefs and an analysis of the basic concepts employed in the expression of such beliefs.

1b. Economic concept - relating to household management; ideas dealing with production, distribution, and consumption of commodities.

1c. Sociolocial concept - oriented or directed toward social needs and problems; ideas relating to the interaction of the individual and the group.

(Taken from Webster's Third New International Dictionary, 1966)

2. To meet the manpower needs of society

- widely accepted purpose of vocational education
- agreed upon by most professionals to be the highest priority for a program of vocational education
- Society needs manpower to maintain and develop an adequate standard of living.
- Shifts in consumer demand alter the need for manpower, causing new training needs to arise.
- "Work behavior is social behavior and, as such, may be one of the most fulfilling and enriching experiences of life" (5, p.127).
- "Full industrial action (work in industry) leads to increased length of life, amount of leisure for young and old persons" (5, p.132).

3. To increase the options available to each student

   - In a democracy, every student must have enough education to enable him to understand the basic problems of society, to vote intelligently, to develop fully his human talents (5).

   - Schools need to offer utilitarian education as well as liberal education.

   - There are many ways to earn a living. More exposure to occupational models may be necessary.

   - Vocational education may be one answer to the following question: In what types of education do society and individual students get the best return on their investment of time and money?

   - With the shift in goals to human resource development, vocational education emphasizes transferability of skill and knowledge and strives to provide opportunities for geographic and occupational mobility.

   - Vocational education has been identified as having the potential to assist in raising the general standard of living of many people, to reduce crime and youth unemployment.

4. To serve as a motivating force to enhance all types of learning

5. Ideally vocational education opens options for making career decisions and establishes a sound foundation for developing human talents, potential, and interests in school and community.

6. a. true
   b. true
   c. false

7. a. false
   b. true
   c. true
   d. true

8. a. true
   b. false
   c. true

9. a. false
   b. false
   c. false
   d. true
   e. true
   f. true

GOAL 1.3

1. No. Vocational education is meant to serve any individual who can benefit from it, including senior high school students, community college students, handicapped, disadvantaged, bright students, dull students, average students, job-entry candidates, high-level technicians, adults, women, minorities, employed, unemployed.

2. Yes, if success or program effectiveness is measured by a consistent increase in enrollment. Vocational education enrollment has increased at every educational level.

3. Yes. Based on the past and present trend of continuous growth in vocational education enrollment, there is every reason to believe that such growth will continue. There is nothing foreseeable in the immediate future that would seem to forestall the need for trained manpower in this country.

4. Yes. According to placement reports for fiscal year 1974, 1,446,249 students completed programs in vocational education. Over 500,000 of these students were placed in full-time employment. More students were placed full-time than "left unemployed," "continuing study," or "status unknown."

5. Yes. Federal, state, and local expenditures have increased since 1965 on a continuous basis, local funding exceeding federal and state sources.

6. a. false
   b. true

7. a. false
   b. true
   c. true
   d. true
   e. true

8. a. true
   b. true
   c. false

Appendix B:
Possible Self-Check Responses

GOAL 1.1

1. What were the four main characteristics of vocational education as defined by the Smith-Hughes Act of 1917?

   (1) Vocational education is under public supervision.

   (2) The major purpose of vocational education is to fit individuals for useful employment.

   (3) Vocational education shall begin after the age of 14 and provide education below the college level.

   (4) Vocational education is for individuals who have entered or are prepared to enter work on the farm or in trades and industry.

2. What are the five main characteristics of vocational education as currently defined by the American Vocational Association?

   (1) Vocational education is under public supervision or under contract with a state board or local educational agency.

   (2) Vocational education is designed to prepare individuals for gainful employment.

   (3) Vocational education is also designed to prepare individuals for enrollment in advanced technical education programs.

   (4) Vocational education does not include education for the professions or occupations which require a baccalaureate or higher degree.

   (5) Vocational education is to prepare individuals for employment as semiskilled or skilled workers, technicians, or subprofessionals in recognized or new or emerging occupations.

3. What is the most recent legislation which provides a comprehensive definition of vocational education?

__X__ a. Vocational Amendments of 1968
_____ b. Education Amendments of 1972
_____ c. Vocational Education Act of 1963

4. What is meant by the phrase "the context of vocational education"?

_____ a. all the occupational service areas which are included in vocational education programs
__X__ b. the environment in which vocational education is found, including its relationships to other kinds of education
_____ c. the relationship of vocational education and career education

5. For questions 5 and 6 check the statement that most accurately describes the relationship between vocational education and general education. (Check only one answer for each question.)

__X__ a. Both are equally important for job success.
_____ b. Both are given only at the high school level.
_____ c. Both provide career decision-making skills.

6. _____ a. Students should participate in either general education or vocational education; the two should not be mixed.
__X__ b. Both make contributions to the general development of the student.
_____ c. More students are enrolled in vocational education than in general education.

7. For questions 7 and 8 check the statement that most accurately describes the relationship between vocational education and career education. (Check only one answer for each question.)

____a. The main purpose of career education is to prepare students for vocational education by the time they reach high school.

_X_b. Both vocational education and career education emphasize preparation for work as one of the basic goals of American education.

____c. Career education is a part of vocational education and should be offered only at the senior high school level.

8. ____a. Career education and vocational education emphasize four phases at different grade levels: awareness, orientation, exploration, preparation.

____b. The importance of vocational education has diminished as a result of career education.

_X_c. Vocational education is an important part of the preparation phase of career education.

9. Which statement most accurately describes the relationship between vocational education and the community college?

____a. Community colleges enroll more vocational education students than secondary schools.

____b. There are more community colleges than area vocational schools.

_X_c. The largest portion of postsecondary vocational students is likely to be adults who return to update and upgrade their working skills.

10. Which statement most accurately describes the relationship between vocational education and adult education?

_____a. Vocational educators are not involved with conducting non-occupation-related classes for adults.

_____b. There are very few adults enrolled in vocational classes.

__X__c. Part-time and full-time vocational training classes are provided for adults at both the secondary and post-secondary levels.

11. Which statement most accurately describes the relationship between vocational education and special education?

__X__a. Vocational education has been mandated by law to provide education for the disadvantaged and handicapped.

_____b. Vocational education should not be considered a means for the disadvantaged to join the mainstream of American society.

_____c. There are no specific vocational programs that have been designed to serve the disadvantaged and handicapped.

GOAL 1.2

12. Under what three categories are the fundamental concepts of vocational education typically classified?

-philosophic
-economic
-sociological

13. List two philosophic justifications for vocational education.
(Students' answers should include at least two of the following.)

- Schools need to serve the entire student population, both academic and vocational.
- Educational leaders throughout U.S. history have identified career development as a major educational objective.
- Schools need utilitarian education as well as liberal education.
- The general public views schools and education as a means to obtain an advance in employment.

14. What is the major economic reason for including vocational education as an integral part of total education?

____a. Vocational education is needed to train more people for the "heavy" industries and manufacturing because it is the fastest growing occupational strata in the U.S.

____b. Vocational education can eliminate poverty.

_X_c. Trained manpower is needed for national economic growth.

15. Which statement best describes the sociological foundation for vocational education?

_X_a. Vocational education is one way of improving the general standard of living of many people.

____b. There is evidence that vocational education has greatly reduced juvenile delinquency and adult crime.

____ Work is important to our society only from an economic point of view.

16. Write out the three basic objectives of vocational education as defined by Evans; then match the statements below with the appropriate objective by listing the letter of the statement under the appropriate objective.

a. This is the earliest and most widely accepted objective of vocational education.
b. Vocational education provides many alternatives for occupational choice.
c. Schooling should be as relevant as possible to as many students as possible in order to encourage and enhance individual development toward successful living.
d. Students should be able to make connections between school subjects and employability.
e. This objective remains as the highest priority for vocational education programs.
f. This objective has emerged due to the new emphasis placed on establishing a more sociological and humanitarian orientation for vocational education.

To meet the manpower needs of society (a,e)
To increase the options available to each student (b,f)
To serve as a motivating force to enhance all types of learning (c,d)

For questions 17, 18, and 19 list two major contributions of vocational education in regard to the following areas:

Manpower needs
Educational relevancy or innovation
Reduction of unemployment

(Students' answers should include two of those suggested here under each area.)

17. Contributions to manpower needs

- Employers have reported that the distributive education program is a valuable source of competent sales people and management trainees.
- In its 45-year history vocational education has responded well to the nation's needs in two world war efforts, the depression of the 1930s, and the readjustment of World War II veterans.
- New programs have been developed to prepare individuals for emerging careers in health services, environmental conservation, fast foods industry, and aeronautics.

18. Contributions to educational relevancy or innovation

- cooperative education
- utilization of local advisory groups
- youth groups
- placement and follow-up of students

19. Contributions to reduction of unemployment

- Manpower Development Training Act (MDTA)
- Cooperative Area Manpower Planning System (CAMPS)
- Area Redevelopment Act
- Comprehensive Employment Training Act

20. Write a rationale of the need for vocational education ten years from now. The rationale statement should not exceed five sentences. (Students' answers should include at least three of the following statements or similar statements.)

- High unemployment among adolescents is likely to increase; vocational education can help reduce this trend.
- Women and minorities will need more training and encouragement to enter new occupational areas.
- Vocational education is needed to assist in urban rebuilding, improved transportation, and crime reduction.
- Vocational education is needed to help improve and maintain environmental quality.
- Vocational education is needed to help provide more options for the handicapped and disadvantaged.

GOAL 1.3

21. List five broad characteristics of the people typically served by vocational education.

- in-school group and out-of-school group
- senior high school students, community college students, area vocational school students
- the handicapped and disadvantaged
- bright students, dull students, average students, functionally illiterate individuals
- job entry candidates and higher level technicians
- adults and teenagers
- women entering or re-entering the labor force
- employed and unemployed

22. Total enrollment in vocational education from 1960 to the present has:

__X__ a. increased.

_____ b. decreased.

_____ c. remained the same.

23. One of the largest increases in vocational enrollment took place:

__X__ a. between 1964 and 1965.

_____ b. between 1960 and 1961.

_____ c. between 1966 and 1967.

24. Since at least 1965 vocational enrollments have been highest at:

_____ a. the postsecondary level.

_____ b. the adult education level.

__X__ c. the secondary level.

25. From 1966 to 1974 vocational enrollments have been higher in:

__X__ a. adult education than in postsecondary education.
_____ b. adult education than in secondary education.
_____ c. special needs than in postsecondary education.

26. In 1966 how many states enrolled at least 50 percent of their secondary school population in vocational education?

_____ a. five states
__X__ b. one state
_____ c. at least ten states

27. During 1966 vocational enrollments in postsecondary education in most states:

_____ a. exceeded 40 percent of the 20-to-24 year age group.
_____ b. accounted for about 30 percent of the 20-to-24 year age group.
__X__ c. accounted for less than 5 percent of the 20-to-24 year age group.

28. According to the placement reports of fiscal year 1974, 1,446,249 students completed programs in vocational education. What happened to most of these students upon completion of their programs?

_____ a. More students were left unemployed than placed in full-time work.
_____ b. More continued with their studies than were placed in full-time work.
__X__ c. More were placed in full-time work than those left unemployed, those with status unknown, or those continuing study.
_____ d. Most could not be accounted for.

☆GPO 692-183-1976

29. Which statement most accurately describes the general trend in expenditures for vocational education?

__X__ a. Vocational education has experienced continuous growth in enrollments and expenditures.

_____ b. For every state and local dollar spent, approximately four federal dollars were expended.

_____ c. Increases in vocational expeditures occur most frequently during depression periods.

30. Which statement most accurately describes the comparison among federal, state, and local expenditures for vocational education?

_____ a. The Federal Government provides the majority of funds for vocational education programs.

_____ b. State expenditures for vocational education usually exceed local expenditures.

__X__ c. State and local expdnitures have consistently exceeded federal expenditures. Presently, for every federal dollar spent approximately six state and local dollars were expended.

31. Which statement most accurately describes vocational expenditures at the various educational levels?

__X__ a. Federal, state, and local expenditures are greatest at the secondary level.

_____ b. Only state and local expenditures are greater for secondary vocational programs. Federal expenditures are greater at the postsecondary level.

_____ c. In fiscal year 1974, there were no expenditures for vocational programs for the handicapped.